

Handout 4.5 Unit plan template sequences

ICT unit plan	Number of lessons	6
Unit title:	A game for Year 3	
Year group:	7	
Overview:	In this unit, pupils construct a game that helps children in Year 3 develop their skills in identifying appropriate word endings. Pupils produce a user guide for the game, a test plan to establish whether the game works, and an evaluation of the game and guide based on peer feedback (from developed criteria) and from testing with the Year 3 children.	
Substrands:	2.3 Sequencing instructions (first and second threads), 3.1 Fitness for purpose (first thread), 4.1 Evaluating work (second and fourth threads)	
What prior knowledge do pupils bring with them?	Prior units will have addressed fitness for purpose and audience, and criteria to develop work, and used common forms and conventions in a paper-based medium.	
Level of the majority of pupils:	4	
Key vocabulary:	target audience, purpose, success criteria, story board, flow chart (and related terms), software-specific vocabulary (e.g. hyperlink, sprite, loop, instruction, syntax, decision), feedback, evaluation	
Potential misconceptions:	<p>Planning is not important.</p> <p>Success criteria are not required. You are the best person to evaluate your own work.</p> <p>It is easier to list out all repeated instructions. A linear path is the only solution.</p> <p>Sub-procedures always start from the same originating point. Sub-procedures cannot be part of a loop.</p>	
Key questions/dialogue:	<p>How do we know what success looks like?</p> <p>Where do I use loops in my game? How do I do this? What will happen if I change part of the</p>	

	sub-procedure? How does the creation of a sub-procedure make the set of instructions more efficient? Why isn't my/your game working? What happens if I click there? Was my game a success?
Assessment opportunities:	Story board – annotation Outline structure – with annotation The game User documentation Presentations Evaluation of learning
Learning objectives (Pupils get better at...)	2.3 Sequencing instructions, first thread: rationalise a set of instructions by repeating sections 2.3 Sequencing instructions, second thread: plan and implement sets of instructions, predicting outcomes before execution 3.1 Fitness for purpose, first thread: recognise the common layouts and conventions used in different types of communication and how these address intended and familiar audience needs 4.1 Evaluating work, second thread: agree and use simple criteria, and understand how to improve their work 4.1 Evaluating work, fourth thread: act purposefully on feedback

Learning outcomes (Pupils can...)	<p>Group instructions, events and actions which need repeating</p> <p>Develop, test and refine sequences of instructions to produce a game for Year 3 pupils</p> <p>Make appropriate choices in layout, content and appearance when producing a user guide to meet the needs of Year 3 pupils</p> <p>Create simple criteria for a user guide and game for Year 3 pupils, and use their criteria to evaluate the effectiveness of this guide and game for Year 3 pupils</p>
--	--

Context:	<i>(Put an X in the context being used)</i>	Demand	<i>(Indicate whether H, M or L demand for the areas)</i>
Work and education	X	Familiarity	L
Community, citizenship and environment		Complexity	M
Media and communications		Technical demand	H (for programming software) M (for multimedia software)
Family, home and social issues	X	Independence	L/M

ICT FS (Build)	Develop, present and communicate information: 3.1 work accurately and proofread, using software facilities where appropriate for the task; 3.2 produce information that is fit for purpose and audience using accepted layouts as appropriate; 4.1 evaluate the effectiveness of ICT tools to meet presentation needs; 4.2 review and modify work as it progresses to ensure the result is fit for purpose and audience
ICT FS (Applying)	Use ICT systems: 1.1 use correct procedures to start and shut down an ICT system; 1.2 use a communication service to access the internet; 1.3 select and use software applications to

	meet needs and solve given problems; 1.4 recognise and use interface features effectively to meet needs; 1.5 adjust system settings as appropriate to individual needs; 2.1 use ICT to plan and organise work; 3.1 work with files and folders to organise, store and retrieve information; 4.1 minimise physical stress; 4.2 keep information secure; 4.3 understand the danger of computer viruses, and how to minimise risk; 4.4 understand the need to stay safe and to respect others when using ICT-based communication
Mathematics FS (Applying)	none
English FS (Applying)	Speaking and listening: Take full part in formal and informal discussions/exchanges Writing: Write documents to communicate information, ideas and opinions using formats and styles suitable for their purpose and audience

Teaching strategies and activities	Outline – teaching content and approaches	Resources	Notes
Lesson 1 Understanding the problem to be solved	A problem is outlined for the pupils. Teachers and pupils identify success criteria through investigating a sample game. Pupils consider ideas for their own games.	Two sample games aimed at Year 3, e.g. a number game and a science game – they should not have a literacy focus because it is too close to the game they are developing Project brief through video/email	Homework: pupils individually identify the focus for their games
Lesson 2 Planning how it will look	In their pairs, pupils establish a focus and roles. Complete block diagram based on	Story-board template – for block diagram 1 for opening screen, one for question, one for correct answer, one for	Homework: pupils link screenshots for a different game to a structure defined in a flow chart

	<p>decisions made for homework.</p> <p>Pupils learn how to use a flow chart to plan progress through the game.</p> <p>Create a flow chart based on decisions made so far.</p> <p>Pairs review planning against identified success criteria from Lesson 1.</p>	<p>incorrect answer, one for closing screen</p> <p>Sample snakes and ladders material (PowerPoint or IWB file showing board, elements to include in flow chart, completed flow chart with symbols and possible solution)</p> <p>Flow chart with Word help sheet</p>	
<p>Lesson 3</p> <p>Planning how it will work</p>	<p>Pupils peer-assess each other's homework and identify where the screenshots are correctly placed in the structure.</p> <p>Identify the technical requirements of the software being used.</p> <p>Modelling techniques to develop a sequence of instructions for a game.</p> <p>In pairs, pupils begin to implement their own solutions.</p>	<p>Game-development software</p> <p>Help files</p>	
<p>Lesson 4</p> <p>Techniques and skills for implementation</p>	<p>Pairs continue implementation and review their decisions against new insights.</p> <p>Teacher models further skills based on observation of pupils and their solutions.</p> <p>Pairs continue implementation.</p> <p>Pairs look at an existing user guide to identify common forms and conventions, and establish criteria.</p>		<p>Homework: plan and draft a user guide</p>

<p>Lesson 5 Implementation continued</p>	<p>Class reviews progress of the games, and pupils share learning.</p> <p>Pairs complete implementation, including the user guide which they planned and drafted as homework.</p> <p>Pupils review each other's solutions to choose a game to be reviewed, possibly by the target audience (Year 3).</p> <p>Send email to Year 3 in primary school. Game reviewed.</p> <p>Class reviews one guide for common forms and conventions against criteria.</p>	<p>Wordprocessing/desktop-publishing software</p> <p>Access to email</p>	
<p>Lesson 6 Evaluation and review</p>	<p>Pupils learn how to use feedback as a tool for development.</p> <p>Pupils use feedback to identify the improvements and alterations required and present them to the class.</p> <p>In groups, pupils evaluate their learning against the initial learning objectives, and complete this individually for homework.</p> <p>Pupils make alterations (if time allows).</p>		<p>Homework: evaluation</p>